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What Are the Impacts of Late-life Widowhood or Divorce on Income Replacement Rates?

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.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published
*	significantly different from reference category ($p < 0.05$)

What Are the Impacts of Late-life Widowhood or Divorce on Income Replacement Rates?

By Sébastien LaRochelle-Côté, John Myles, and Garnett Picot

This article in the *Economic Insights* series examines the income replacement rates achieved in old age by Canadians who experienced marital dissolution, through either widowhood or divorce, after age 55. It is based on results published in the research paper *Income Replacement Rates Among Canadian Seniors: The Effect of Widowhood and Divorce.*

There has long been concern regarding the financial security of seniors as they age, particularly among those experiencing marital dissolution in later life. It is often hypothesized that older individuals, particularly women, who experience marital dissolution are more likely to face financial challenges than those who remain married. Do late-life changes in marital status have an impact on the financial well-being of older Canadians? And are women more likely to be affected by such changes?

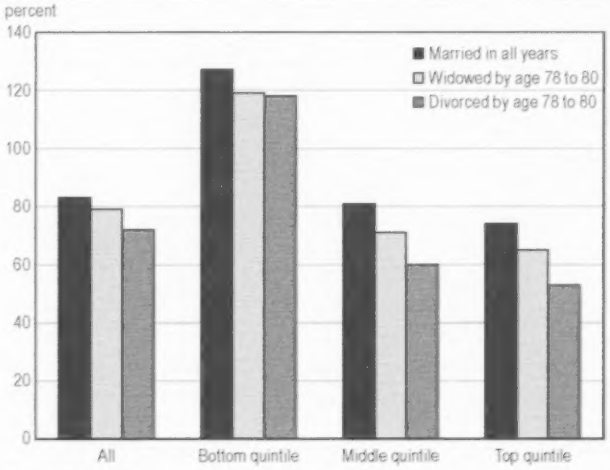
Although financial well-being can have many dimensions, this paper focuses on the income replacement rates of a cohort of individuals aged 54 to 56 in 1983 to examine such a notion. The replacement rate can be defined as the extent to which family income during the working years—here, income at age 54 to 56—is being replaced by other sources of income when people reach a certain age—in this case, when the cohort reached age 78 to 80 (24 years later).

Divorced or separated women had the lowest replacement rates

Among women, divorce (or separation) had a greater effect on replacement rates than widowhood, although both divorced and widowed women had lower rates than those who remained married (Chart 1). Among women who were married throughout the reference period, the after-tax family income at age 78 to 80 was 83% of the after-tax family income at age 54 to 56; that is, they had a median replacement rate of 83% at the time they were aged 78 to 80. The median replacement rate was lower among women who were widowed by that age (at 79%) and lowest among those who were divorced (at 72%).

However, it is also important to examine replacement rates across the income distribution, as the relationship between divorce/widowhood and replacement rates may be different for those who initially had very high or very low levels of family income.

Chart 1
Median replacement rates at age 78 to 80 by marital status, women



Source: Statistics Canada, Longitudinal Administrative Databank.

Among women in the **bottom** quintile at age 54 to 56 (Chart 1), median replacement rates **increased** between ages 54 to 56 and 78 to 80 for all marital groups, as evidenced by rates above 100%. However, the increase was smaller among women who were divorced or widowed at age 78 to 80 (at 118% and 119%,

respectively) than among women who remained married (at 127%).

The differences across marital status categories were larger in the middle and top quintiles. Among women in the **middle** quintile, the median replacement rates at age 78 to 80 were 81% among those who remained married, 71% among those who were widowed, and 60% among those who were divorced. Among women in the **top** quintile, the median replacement rates were again highest among those who remained married (at 74%) and lowest among those who were divorced (at 53%).

Why does marital dissolution have a greater effect among women in the higher quintiles? It is mainly because divorced women in the top and middle quintiles did not receive as much income from investments, capital gains, and private pensions (including employer-sponsored pensions, income from registered retirement savings plans and retirement income funds, severance payments, and annuities) as their married counterparts, even though they initially had similar levels of family income (at age 54 to 56). Furthermore, the receipt of public pension income (Canada Pension Plan/Quebec Pension Plan, Old Age Security, Guaranteed Income Supplement) by divorced women in the bottom income quintile reduced the effect of divorce on the replacement rates for women in that quintile.

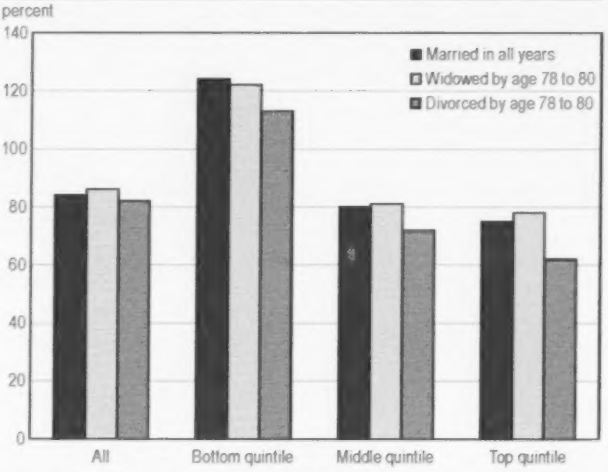
Divorce and widowerhood had a relatively small effect on the income replacement rates of men

Among men, marital status did not matter as much as it did in the case of women, since replacement rates at age 78 to 80 varied between 82% and 86% across all marital status categories (Chart 2). When differences were examined across quintiles, however, a slightly different picture emerged. Although widowers generally differed little from their always-married counterparts, divorced (or separated) men had replacement rates lower than those of always-married men, especially in the top income quintile. That said, even though the replacement rates of the divorced were lower than those of the always-married, the difference was not as great for men as for women. As noted above, widowerhood had little effect on the replacement rates of men.

Multivariate analysis confirms these results

The above-mentioned results are based on descriptive statistics for always-married, divorced/separated, and widowed groups. However, there may be differences among these three groups, such as their educational attainment, that affect their replacement rates at age 78 to 80. To be certain that it is differences in marital status, and not other factors, that result in the differences in replacement rates between, for example, the always-married and divorced groups, it is necessary to control for other possible factors affecting the rates. When this was done by using a fixed effects statistical model, the general results outlined above still held.

Chart 2
Median replacement rates at age 78 to 80 by marital status, men



Source: Statistics Canada, Longitudinal Administrative Databank.

Similar results were obtained with a more recent cohort

The results obtained above are based on a sample of men and women who were aged 54 to 56 in 1983, and may therefore not be representative of more recent cohorts of retirees who experienced marital dissolution. To examine this issue, another set of replacement rates for the most recent period available were produced for individuals aged 54 to 56 in 1993 and reviewed against comparable replacement rates obtained for the 1983 cohort— i.e., when both cohorts were aged 68 to 70.

Table 1
Median income replacement rates at age 68 to 70 among individuals who were aged 54 to 56 in 1983 or in 1993, by marital status

	Women	Men
	percent	
Married at age 54 to 56, married at age 68 to 70		
1983 cohort	0.80	0.80
1993 cohort	0.85	0.85
Married at age 54 to 56, widowed by age 68 to 70		
1983 cohort	0.78	0.83
1993 cohort	0.85	0.88
Married at age 54 to 56, divorced by age 68 to 70		
1983 cohort	0.70	0.81
1993 cohort	0.70	0.80

Source: Longitudinal Administrative Database.

The data provide no evidence that the effect of divorce on the replacement rate diminished between the 1983 and 1993 cohorts, as one might have expected. If anything, the difference between the still-married and the divorced/separated in the replacement rates at age 68 to 70 was even larger among the 1993 cohort. Among women, the median replacement rate was 10 percentage points lower among the divorced than among the still-married in the 1983 cohort, and was 15 percentage points lower among same in the 1993 cohort.

The results regarding widowhood suggest little change between cohorts. Although both rates were generally higher for the 1993 cohort, the differences between the still-married and the widowed were relatively similar for both cohorts. It may be, however, that there was simply not enough time between cohorts for significant change to take place.

References

This article in the *Economic Insights* series is the result of a collaborative effort by a team of researchers from the Social Analysis Division and Labour Statistics Division of Statistics Canada and the University of Toronto. For more information, see:

LaRochelle-Côté, S., J. Myles and G. Picot. *Income Replacement Rates Among Canadian Seniors: The Effect of Widowhood and Divorce.* Statistics Canada Catalogue no. 11F0019M. Ottawa, Ontario. Analytical Studies Branch Research Paper Series. No. 343.